

CLAIMS

We claim:

- 1 1. A method for managing a plurality of sources comprising:
2 determining an empirical measurement of a performance of each of the
3 plurality of sources; and
4 selecting a source in reference to the empirical measurement of the
5 performance of each of the plurality of sources.
- 1 2. The method of claim 1, wherein the determining further comprises:
2 obtaining an empirical measurement of a throughput speed of each of the
3 plurality of sources from at least one third-party source.
- 1 3. The method of claim 1, wherein the determining further comprises:
2 obtaining an empirical measurement of a throughput speed of each of the
3 plurality of sources from a local source.
- 1 4. The method of claim 1, wherein the performance further comprises a
2 throughput speed.
- 1 5. The method of claim 1, wherein the performance comprises latency.
- 1 6. The method of claim 5, wherein the measuring further comprises:
2 measuring the elapsed time of a transmission involving each of the plurality
3 of sources.
- 1 7. The method of claim 5, wherein the measuring further comprises for each of
2 the plurality of sources.
3 recording transmission time from the current time and date;
4 initiating a transmission to a download source of the plurality of sources;

5 receiving a response to the transmission from the source;
6 recording the receipt time from the current date and time; and
7 determining the throughput speed of the source from the difference between
8 the receipt time and the transmission time.

1 8. A computer-accessible medium having executable instructions for managing
2 a plurality of sources, said executable instructions capable of directing a processor
3 to perform:

4 determining an empirical measurement of a throughput speed of each of the
5 plurality of sources; and
6 selecting a source in reference to the empirical measurement of the
7 throughput speed of each of the plurality of sources.

1 9. The medium of claim 8, wherein the throughput speed further comprises a
2 download speed.

1 10. The computer-readable medium of claim 8, wherein said instruction for
2 determining further comprises an instruction capable of directing the processor to
3 perform:

4 measuring a throughput speed of each of the plurality of sources.

1 11. The medium of claim 10, wherein said instruction for measuring further
2 comprises instructions capable of directing the processor to perform for each of the
3 plurality of sources:

4 recording transmission time from the current time and date;
5 initiating a transmission to a download source of the plurality of sources;
6 receiving a response to the transmission from the source;
7 recording the receipt time from the current date and time; and
8 determining the throughput speed of the source from the difference between
9 the receipt time and the transmission time.

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1 12. A computer data signal embodied in a carrier wave and representing a
2 sequence of instructions for managing a plurality of sources which, when executed
3 by a processor, cause the processor to perform the method of:

4 determining an empirical measurement of a download speed of each of the
5 plurality of sources; and
6 selecting a source in reference to the empirical measurement of the
7 download speed of each of the plurality of sources.

1 13. The computer data signal of claim 12, wherein the determining further
2 comprises for each of the plurality of sources:

3 recording transmission time from the current time and date;
4 initiating a transmission to a download source of the plurality of sources;
5 receiving a response to the transmission from the source;
6 recording the receipt time from the current date and time; and
7 determining the throughput speed of the source from the difference between
8 the receipt time and the transmission time.

1 14. The computer data signal of claim 12, wherein the throughput speed further
2 comprises latency.

1 15. A computerized method for managing a plurality of sources comprising:
2 storing transmission time from the current time and date;
3 initiating a transmission to a download source of the plurality of sources;
4 receiving a response to the transmission from the source;
5 storing the receipt time from the current date and time;
6 determining the latency of the source from the difference between the receipt
7 time and the transmission time; and
8 selecting a source in reference to the latency speed of each of the plurality of
9 sources.

- 1 16. The computerized method of claim 15, wherein source further comprises a
2 source in a peer-to-peer network.
- 1 17. The computerized method 15, wherein the:
2 the transmission further comprises a TCP/IP synchronized idle message; and
3 the response further comprises a TCP/IP acknowledgment message.
- 1 18. A computer-accessible medium having executable instructions for managing
2 a plurality of sources, said executable instructions capable of directing a processor
3 to perform:
4 determining a plurality of round-trip timings of a packet transmission in
5 conjunction with each of a plurality of possible sources; and
6 selecting a source in reference to the plurality of round-trip timings.
- 1 19. The medium of claim 18, wherein the source further comprises a source in a
2 peer-to-peer network.
- 1 20. The medium of claim 18, wherein said instruction for determining further
2 comprises instructions capable of directing the processor to perform:
3 recording transmission time from the current time and date;
4 initiating a transmission to a download source of the plurality of sources;
5 receiving a response to the transmission from the source;
6 recording the receipt time from the current date and time; and
7 determining the round-trip timing of the source from the difference between
8 the receipt time and the transmission time.
- 1 21. A computerized method for managing a plurality of sources comprising:
2 obtaining a list comprising a plurality of identification of sources;

3 initiating a plurality of socket connections, the plurality of socket
 4 connections further comprising one socket connection for each of the
 5 plurality of sources, yielding a plurality of initiated socket
 6 connections;
 7 receiving a response for the each of the plurality of initiated socket
 8 connections, yielding a plurality of responses; and
 9 selecting the fastest source of the plurality of sources in reference to a
 10 predetermined file size and in reference to the response.

1 22. The computerized method of claim 21, wherein the predetermined file size is
 2 less than a predetermined threshold file size and wherein the selecting further
 3 comprises:
 4 selecting the source associated with the response that is received first.

1 23. The computerized method of claim 21, wherein the predetermined file size is
 2 greater than a predetermined threshold file size and wherein the selecting further
 3 comprises:
 4 measuring the latency of each of the plurality of sources; and
 5 selecting a source in reference to the download speed of each of the plurality
 6 of sources.

1 24. The computerized method of claim 23, wherein measuring the latency
 2 further comprises:
 3 storing the time and date of each of the plurality of initiating socket
 4 connections;
 5 storing the time and date of each of the plurality of responses; and
 6 determining the download speed of each of the plurality of sources from the
 7 differences between the time and date of each of the plurality of
 8 responses and the time and date of each of the plurality of initiating
 9 socket connections.

1 25. A system for managing sources in a peer-to-peer network comprising:
2 a processor; and
3 software means operative on the processor for determining an empirical
4 measurement of a throughput speed of each of the plurality of
5 sources and selecting a source in reference to the empirical
6 measurement of the throughput speed of each of the plurality of
7 sources.

1 26. The system of claim 25, wherein the throughput speed further comprises a
2 round-trip time.

1 27. The system of claim 25, wherein the throughput speed further comprises a
2 latency.

1 28. A computerized system comprising:
2 a determiner of an empirical measurement of a throughput speed of each of
3 the plurality of download peer-to-peer network sources; and
4 a selector of a source in reference to the empirical measurement of the
5 throughput speed of each of the plurality of peer-to-peer network
6 sources.

1 29. The computerized system of claim 28, the determiner further comprising:
2 a transmitter of a message to a download source of the plurality of sources;
3 a recorder of the time of a transmission of a message, operably coupled to
4 the transmitter;
5 a receiver of a response to the transmission from the source, operably
6 coupled to the transmitter;
7 a recorder of the time of receipt of a response; and

8 a determiner of the throughput speed of the source, from the difference
9 between the receipt time and the transmission time.

1 30. The computerized system of claim 28, wherein the:
2 the message further comprises a TCP/IP synchronized idle message; and
3 the response further comprises a TCP/IP acknowledgment message.

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